NEW PHYSICS CONFIRMED BY NUCEAR COSMIC "LABORATORY" : SUCCEEDING BIG-BANGS, BIRHES OF GALAXIES, UNINTERACTING COSMIC RAYS. CONSEQUENCES AS ACCELERATORS.

Specification.

Technical field of invention. Invention concerns the global physical properties of matter (provable only from Cosmos) with confirmation of end of Einstein-Bohr Physics and its practical revolutionary consequences.

Part I. Light cannot leave Our Classical Universe: Global End of 2nd Thermodynamic Law.

a). Registrable strong light intensities of wide spectra (since Big Bang), resting in Universe after re-excitations, are clearly unexplainable.

According to numerous data, the presence of diffuse cosmic background radiation (present in several spectral regions: from radio waves until γ- rays, including micro, infrared, visible and ultraviolet waves [1-5]) is so strong that this energy "could be used to heat up all matter (where) the temperature would be greater than thousands of milliards °K" [6,7] , that "remains one of the unresolved puzzles of cosmology" [7] . There is, for instance "strong upper limits to any angular cross-correlation between the CMB (cosmic microwave background) temperature and the extragalactic X-ray background intensity" [3] . Evidently, the radiation of the discrete today sources is added to the background cosmic radiations: a significant fraction of the cosmic X- ray background (XRB) is the discrete sources largely due to the accretion onto massive black holes [8] , and the observed AGN (active galaxy nucleus), that produce a large fraction of the hard X- ray background, logically is one of sources of the background radiation of sub-mm diapason [9], wherein the UV flux, from "early- formed" massive black holes, can be the additional sources of the UV background intensity [10]. Such additions (less than 1/4), by discrete sources to the diffuse γ- rays fluxes in Universe, take place too [4].

But the most spectacular radiation (of diffuse background) is CMB: exceptionally (not as other regions of spectrum), it is attested as the spectrum of Black Body with the temperature equal to 2.726 °Kl ("the most perfect black body ever seen") [11]) with totally isotropic radiation [12]. It is accepted that "a see of black body radiation" relaxed to the thermal equilibrium with sufficiently hot plasma during period of primordial Universe. But "the homogeneous expansion of primordial Universe causes the radiation to cool as in adiabatic process", when the interaction (of radiation) with matter was negligible" [13].

However, in reality, it is not even very serious. It is not the classical adiabatic process with the piston, where the counter-action force is infinitively weaker than that of action, and consequently, the energy of the work is not transformed into the kinetic energy of the piston. Here, oppositely: there is, justly, the very rapid Primordial Universe expantion with well diminished work, where the potential energy of the compressed matter is transformed rather into kinetic energy of such matter not only without cooling, but oppositely. Moreover, although they have the Planck spectrum, CMB photons are not in thermal equilibrium. The mean free path of photons in the Universe must be huge or else we would not see galaxies and quasars out to distances of thousands Mpc" [3]. Because of such enormous free paths, the great majority

of such light had to leave Our Universe instead of staying in such cool diffuse state (it means after too numerous re-emissions /including reflections/) with very powerful intensities de facto. Moreover, due to thermal effects of obtained (in situ) plasma, its spectrum is different from that of Black Body in vacuum [14] and the experimental agreement with models, structure of angular CMB spectrum with temperature is not exact [15].

Consequently, one can already reason that the origin of the presence of the enormous diffuse light intensities in the Universe does not have any connection with spectrum of Planck of Black Body and the galaxies produce "the regions of WEAK (in CMB) emission of first plan (foreground), covering 20-30% of sky (contamination of CMB emission [first plan] conducting to changing of the value of general polarization is weak, in spite its strong own value)" [16]. And for instance, justly, only acceptance of Planck spectrum absence in CMB radiation, conducts, already, to interesting consequences [Refs. 15].

Moreover, classically, the Planck radiation law was certainly based on the experimental data obtained from measurements with the cavity radiation. But the relation, necessary for consecutive generalization (quantum energy of radiation is proportional to its frequency: other formula of Planck-Einstein) is the evident principal faiseness[17], that already, itself only, eliminates the application of the empirical law (established only for the cavity) for more general utilization. *It is shown clearly, that the presence of the strong intensities of the electromagnetic diffuse waves (light) of the large spectrum in the Universe asks another explanation.*

b). Real light deflection near the gigantic masses.

The light deflection near the gigantic Black Holes as those of Schwartzchild is well established: more than dozen multiple images (due to lensing) of admitted quasars are already known [18-20]. Effect is net: the black hole begins to shine due to the star (galaxy) light, falling on it because of the influx with help of the "gravitational lensing" [19]. One detects the same influx with the CMB radiation localized by Sun [21].

c). It is neutrino (and antineutrino) concentrations that decide light direction: complete light reflection from Universe borders.

Today, one knows already, that the gravitational lensing, as consequence of Theory of Relativity, does not exist because this theory is false [17,22]. But what is the origin of such light deflection near great masses? It is confirmed already, that the light propagation (and velocity value) [17] are determined by temporary transformation of neutrino (and antineutrino) with the moving front of the electromagnetic wave. Naturally, a stronger neutrino concentration guarantees a larger value of light velocity (for instance in vacuum, the neutrino concentration as well the value of light velocity must be stronger than in water).

But near gigantic masses, the neutrino concentrations (with electron mass [17]) are higher, that must produce the same effect of the refraction /as with increase of refraction index (n), / (to see, for example, also the classical spheres of Huygens), that one, justly, observes, de facto, near Black Hole and the Sun [18-21]. Evidently, in absence of Big Bang neutrinos at the exte-

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rior of the expanding Universe [17,23], the complete light reflection from the Universe borders (as from mirror) takes place, that must happen a number of times.

This is clear and simple basis of the presence of enormous quantities of all diffuse light (of all spectrum naturally) radiated since Big Bang in Universe. This in reason that CMB intensities (only) from the opposite (diametrically) directions of the sky points, are identical ("this is an obvious fact")[24] | (numerous complete reflections), where, evidently, in each direction there is own level of absorptions (of spectrum waves) by such or such galaxy or other cosmic objects [25]. Consequently CMB waves have blue shift in the direction to the observer [15]. Naturally, this Universe, that is not close, can be presented as the closed one to satisfact particular observations [26]. But this approximate replacement does not have to be well solid. For instance, after profound works [27], one cannot see "ghost" images of the radio sources, expectable at positive "space curvature" ("closed" Universe) and positive cosmological constant.

Part II. Different consecutive Big-Bangs and Galaxies Origin: exemplary convergences.

a). Universe mass is essentially greater than that the Critical..

The last data (on the Supernovae), accepted .... enthusiastically by community, propose oppositely, that "expansion of the Universe has been accelerating rather than decelerating in the recent past" [28-30] and moreover "the matter density of the universe.. is a factor 3-4 less than required for closure" [28] . Fortunately, such new triumphing information is too far from the verity, however clair. After proven value of mass of neutrinos and antineutrinos, equal to that of electrons and positrons [17,22], one can easily calculate that such neutrinos (and antineutrinos) represent even more than 99.9% of the Universe mass, If to accept, the following calculations."If the neutrino has the mass of.. 5 eV only, then 30% of the mass in Universe is in the form of light neutrinos" [3] . Such neutrino and antineutrino mass values are, again, well confirmed by the spontaneous orchestra of the new data, concerning the connection between the Supernova explosion and GRB (gamma- ray burst - §II-d). Universe, dominated by neutrinos, was predicted yet by D.Schramm and G.Steigman in their prize work [23].

b). Imminent Universe collapase.

Consequently, after decrease of the expanding speed until zero, the Universe will begin to contract. But, again, due to mechanism, according to which the light (with energy of electromagnetic waves) cannot leave the Universe, the global entropy will begin to diminish (surely, there is no entropy death and 2nd Thermodynamic Law is globally invalid!). Consequently, in the critical moment of contraction, there will be the explosion due to elevated concentration of electro-magnetic waves. But in which moment will this explosion take place? Until which molecular, atomic fragments or particles will matter of Universe explode after 1st strong explosion?

c). "Our" Big Bang: explosion of Universe was until atoms of hydrogen, helium (and some traces of atoms of LI, Be and B).

Fortunately, all traces do clearly exist (and even in strong relief). There is the existence of the universal abundance of the primordial helium (25%!) (and also the traces of deterium, litium, beryllium and boron without other heavier elements) [31-37]. To explain this, they imagined the "Big Bang nucleosynthesis" (BBN) with the creation of light nuclei, deuterium, He-4 and LI-7 during 1st minutes of Universe "[33, 36]', and again, one imagines this nucleosynthesis as having the abortion, without reactions, producing the heavier elements from carbon, that takes place during the stelar nucleosynthesis,"responsible"for the formation of the totality of other nuclei, from carbon until uranium [36].. To explain the presence of the traces of light elements between He and C, they introduce, already, the process of spallation of the heavier nuclear species (C-N-O) by collision with the easy species (H and He) [37]. (For instance, LI must exist since beginning because there is the abundance of LI in the galactic gas during all time of the Universe existence [35]!).

But justly THIS process of spoliation of the heavier elements must take place during the Universe explosion to obtain the easier elements de facto: H and He principally. It was, justly, the process of "Our" Big Bang! The elements as LI-Be-B had to be produced also after this explosion of Big Bang with spoliation but with weaker quantities and, again, these elements are more fragile [31, 37].

One sees that there were no other MORE POWERFUL successive explosions in the more contracted Universe state during "Our" Big Bang because of the presence, of such masses of light elements since "beginning" of Universe. Evidently, this temperature of explosion was weaker than that necessary to "recover" the masses of neutros (black holes, neutro ["neutron"] stars) by reactions, that are opposite to those of the neutro creation [2] (at enormous excess already of concentrations of neutrinos, antineutrinos and neutros).

Consequently, after this great explosion of the heavier elements, their transformation into hydrogen and helium principally, the great masses of Black Holes near the centre of explosion and farer (evidently, yet moving to the mass centre of Universe) had to meet the powerful currents of the hydrogen and helium masses after explosion. And justly, this process proves the Galaxies origin, never imagined by anybody since Ptolomee and Copernik, Galilee, Newton and Kepler.

d). Galaxies Origin and star movements; AGN with Black Holes as centipetal force.

Naturally, the creation of stars due to activation of synthesis reactions (from produced hydrogen) was done only at the beginning of Explosion. This explains the same accepted grand age of elliptic Galaxies, much higher Sun age , absence of the star creation even at TOO favorite conditions near titanic Black Holes [22], the very astonished polarization of galaxies within disk and the origin of rotational movement of stars. Naturally, the time of star life is approximatively inversely proportional to square of their mass [38] (evidently, it depends also on the site of star creation wherein the proportions of helium and hydrogen could be different at the beginning!). And justly, the gigantic less luminous masses (like massive Black Holes) are present (insistently) at mass center of all galaxies (so called: AGN- active galaxy nucleus) [39-42].

Naturally, the currents of hydrogen (and litium) were not symmetrical relatively Black Holes

and the movement in one direction had to win after counter-currents, that is the origin of the fact that, justly, small quantity of galaxies does not have "signes of damages and violences" and there are even very unregular galaxies [42b]. Analogically to the case of formation of Solar System [22], the currents of hydrogen (of stars), that are "higher" ("lower") than principal plane of Galaxy of rotation (like elliptic orbit) (but parallel to Galactic plane, because all currents are parallel to the explosion direction), will have the force (vertical projection of the gravitational force of attraction between the AGN and the current of stars), directed to the central plane (of famous disk) in creating the Galaxy! Consequently, there are the clouds with hydrogen with strong speeds that are more prominent and are found at more than 2 kpc from galactic plane [42c],that must take place due to the "higher" (or "lower") original direction of these currents (like Pluton orbit!). Evidently, the particles of obscure matter move with speeds comparable with those local and circular [41], and the protons move with electrons around AGN of galaxies with corresponding energy (PeV-EeV), procreating "photons" of high energy [42].

Visibly, the difference between the velocities of rotation of the ensemble of the constituents of galaxy around centre of mass [due, logiqually, to the different conditions of "meeting" between Black Body (AGN) and the constituents after explosion] is significant in spiral, elliptic and irregular galaxies [40,42].

Logically, the quasars are "constructed" on the extinguished galaxies, that were already formed before "Our" Big Bang with relatively weak Black Holes. They are the most luminous objects of Universe [40,42]: the luminous masses of currents after explosion are added to those RE-formed around ancient AGN and quasars are linked geometrically avec galaxies [with relatively strong red shift: z(mean) = 2-3 and never blue shift] [40,42]. Normally, after this mechanism, one must estimate: if the quasar has more luminous matter after explosion (and consequently its AGN, unmobile at beginning, is more powerful), it is propulsed more rapidly. And justly, the most luminous quasars have the most strong red shift [40,42]. One must consider that Seyfert Galaxies (which are closer to us) are the galaxies, preformed also, before "Our" Big Bang. And they have more massive black holes and their nucleuses. are 100 time less luminous than the rest [40,42]!

e). More powerful Big Bang takes place when there is no (almost) heavy elements: only neutro masses.

The stars from hydrogen and helium transform these constituents into (finally) the heavier elements and into black holes or "neutron" stars, composed of neutro [42a]. Evidently, if, finally, heavy elements (after these star explosions) are all (almost all) transformed into neutro, the "1st" weaker explosion will not take place and Universe will continue to contract with critical temperature increase to have the capacity to inverse the reaction of Supernova explosion [17,22]

Justly, the mechanism of the beginning of Supernova explosion (that gives the experimental basis to establish the most principal equations of Nuclear Physics), published yet in XXth century [17], is well confirmed by one... explosion (very recent) of experimental publications. Naturally, the most powerful Supernova explosion must begin by creation of γ- rays with neutrinos and antineutrinos ("annihilation" of electrons and positrons) [17]. And justly, one confirms well today that there is the association (connection) between explosion of Supernova and GRB (gamma- ray burst) [43-48] that (both) are more spread at the regions with stronger shift [z (mean) = 1.5- 2] [47]. Justly the GRBs have "afterglows" [43], and the observed Supernovae must be such optical "afterglows". By the way, for instance, the correspondence between several neutrinos and antineutrinos of powerful Supernova 1987A, visible by naked eye and the visible light must be the real coincidence because the directions of these neutrinos do not correspond to this source and moreover, this is even naive to consider the velocities and of light as almost equal (probability is almost zero!).

Consequently, such Big Bangs must be much more powerful. Moreover, all stars are extinguished in the moment of Big Bang: there are no stars in Our Galaxy that have 20 milliard years [42]. And justly, the most powerful cosmic rays from Other Universes [17,22] can be associated with such Big Bangs (duration in time corresponds to dispersion of velocities!). Justly, again in confirmation: such too powerful "rays" exist today in Our Universe [17,22] and there is no correlation between the directions of (their) arriving and their optical sources that can be identified clearly" [49]. The naive cause (distance close to us! but without ANY serious identification) of the absence of cutoff of protons of cosmic rays of such titanic power does not explain the origin of these rayons at less than 50 mpc from us [49]. This absence of cutoff is due to their speed, (much) higher than that of light, where there is no interaction between the proton and electric (and magnetic ["magnetic"]) field of substances on the pathway because these dynamic fields (with frequent re-creation of waves of very frequent transformations of neutrinos into electrons) have "only" the velocity of light [17,22] The fact of noninteraction, justly proves the DYNAMIC nonpermanent "frequently temporary" character of the electric fields: the protons [50,51] of the cosmic rays pass the Sun (well charged) and the Moon [51-53], but do not pass even several meters in the water [54] , confirming TOO evident evidence of the value of their velocity higher than that of light (and their existence!) and again evidently, the definitive end of Einstein-Bohr Physics [17,22]

The unexplainable fact, that certain radio quasars and also simple radiogalaxies are the sites of the "superlight" velocities, wherein the spectrum components are separated with velocities higher than those of light (according to red shift value) [42] , confirms again this chain of the proofs of the end of Einstein-Bohr Physics.

Part III. Practical consequences of invention.

Evidently such developed, well proven, mechanism of Big Bangs, permis to create very elevated and permanent temperatures. After having the classical intensive radiation in the volume, limited by the exterior absence of neutrinos and antineutrinos (with help of very intensive radiation of gamma-rays and the perpendicular electric fields, which remove the electrons and positrons, created from neutrinos and antineutrinos with such irradiation),

one can diminish this volume, imitating the Universe contraction (Parts I and II), that will permit to obtain the well elevated concentration of electromagnetic energy in very small volume with very elevated temperature.

The total absence of interaction (electro-magnetic) of more powerful cosmic rays ("rays") with matter (Part II) and very rare direct interaction (knocking with relatively very small nucleus: at projection on the plane, perpendecular to "rays", its area is too minuscule) of these particles("rays") with the matter, already attest that these very rare knockings of the radioactive matter (on their path) define the level of radioactivity, descovered by Becquerel. Evidently, the stability of nucleus (or rather: minimal critical level of energy of "rays", from which there is already the switching of nuclear reaction of redioactivity) determines the period of the radioactivity because the level of cosmic radiation is similar everywhere in space and time. Consequently, the very thick layers of very heavy element (very dense with big nucleus) like uranium or the matter of new particle neutro, the most dense matter of "neutron" stars [17,22], can diminish the level of cosmic rays and consequently change the period of radioactivity! It is very important to obtain (production) very unstable elements (at price at thousands times more than gold) like mendelevium (atomic number is equal to 101) or the rare isotops, that are produced during the chains of radioactive reactions of decompositions. Again, the discovery of the nature of the "spontaneous" radioactivity (that was the beginning of new era of the science) (always spontaneous for all great physicians!, closed in false space of Einstein-Bohr) is already extraordinary as such!

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P.S. Evidently, the rays having stronger velocity than light (as cosmic) can interact more massively with substance if to increase the concentrations of neutrinos and antineutrinos near these substances (for instance with the matter of neutro, the most dense in Universe [17,22]), because the light velocity and also the velocity of propagations of electro-magnetic fields must increase with increasing of concentrations of neutrinos and/or antineutrinos..

Part III. Practical consequences of invention (continuation).

Sophisticated accelerators for particles having values of tens (see hundreds) of velocities of light. Today, for some augmentation of energy of particles (necesary to go into deeper knowledges in Nuclear Physics or for preparation of the radioactive isotopes), one constructs the accelerators having size of tens of kilometers!!!, which cost milliards and milliards. But with this deepness of the science , one can effectively increase the values of particle speeds above any dream. It was not the "increased" mass of the particles, that prevented the consecutive acceleration (according to falseness of Theory of Relativity), but principal impossibility to accelerate the particles having the speed value close to that of the light with electric field having the speed value of propagation also approximately equal to that light This resulting evident instability and also consecutive periodic vibrations of charges in the field during such movement cannot not to be the sole cause of the synchrotron radiation with the strong particle speeds and the Tcherenkov radiation, because the sole possibility to create the electromagnetic wave is the periodic movement of the charge in electric field, in making

the obligatory work against New force discovered by me [WO 99/56288, WO 00/52989]. So "very simply" in increasing the concentrations (of neutrinos and/or antineutrinos) (with beams) in perpendicular directing magnetic field, one increases proportionally the speed of propagation of these fields to increase strongly the energy of particles. This is the intellignet sophisticated accelerators instead of old science and technic, saturated because of impass of false knowledges, costing milliards of milliards. The ROUTINE description of CLASSICAL ancient accelerators of numerous types is very spread in Classical Books of Science and Technic and in Industrial Property.[55-58].

Creation of these effective beams of neutrinos and antineutrinos.

Evidently, the best means to create beams of neutral particles is to make interactions of well configurated charged particles (electrons and positrons) with help of magnetic fields (very well described [59,60]), as circular and linear collisionners wherein as result, there is creation of neutrinos and antineutrinos and of the γ- radiation, discovered firstly by me [WO 99/56288, WO 00/52989]. ("Positron monocromatic beams of high intensity and weak energy" (and strong one) are well makable too [59]). Evidently the best direction to have well directed beams of neutrinos and antineutrinos is the meeting of beams of electrons and positrons, moving in the same direction, wherein the resulting beams of the neutral neutrinos and antineutrinos are directed in the same directions and well focalized. The dipole (perpendicular to movement), created, at the beginning, during such approchment at parallel movement must produce the vibrations of charges and the electromagnetic waves (one charge in field of another: obligatory condition for wave creation) in directions of movements! This was done de facto in "Device and method to generate the laser radiations of gamma rays" [EP 0715381], wherein the sufficiently routine technics (almost the same as in [20,21]) was well written with details [EP 0715381, 60,61]), wherein as result there is "the forward gaser, that is the laser of monochromatic γ- rays, having the energy superior than several MeV and the back monochromatic γ- gaser" with E< 200 KeV [EP 715381]. According to my original and revolutionary proofs [WO 99/56288, WO 00/52989], during such interactions of electrons and positrons there is the creation of neutrinos and antineutrinos of the same masses (instead of the transformation of the masses in energy $E = mc^2$, accepted and established as New Classics by whole world without ANY challenging). Without doubt according to Mechanics, the strong momentum of movement of electrons and positrons in the directions of the beams cannot change the directions and there is the creation (at the same time) of the beams of neutrinos and antineutrinos according to my discoveries . It means the obtaining of the perfect SATURATED beams of neutral neutrinos and antineutrinos is clearly makable and well described.

§5. Production of electromagnetic waves, that are shorter than gamma (<0.002 Å), never observed, and of electric currents of the same frequences never produced. Direct transformation of electric energy into electromagnetic waves (with efficiency ~100% instead of lamps)..

But from these new accelerators with values of particle speeds much stronger than those of light, one can produce electromagnetic beams with astronomic frequences, never observed and never observable !

It is well known that the synchrotrons (rings of the stocking of charged particles) produce the coherent well polarized stable electromagnetic radiation (at values of particle speeds close to those of light), as pulses with duration of 30 psec and interval between pulses of 1 μsec, wherein this radiation is situated from infrared untill X-rays (hard)[63- "synchrotron radiation"] and until γ- rays in the case of betatrons (also synchrotrons in reality) [as EP 0481865, FR-2594621]. This radiation with these frequences (including the astonishing ones until 1.8×10^{21} Hzll of hard γ- rays) takes place (but with weaker intensity) even without undulators or wigglers, that produce periodic transversal oscillations of the beam (with magnetic field) (but with frequence muchll weaker) [63].

Light of Tcherenkov (Cerenkov). These vibrations at very high frequences take place justly due to relativist instabilities (The "Nobel" LIGHT of TCHERENKOV is of the same nature!), when the value of particle speed approaches that of electric field propagation. The electric field, is the pulsations of beginnings of the temporary transformations : neutrino⟹ electron and antineutrino⟹ positron (for negative and positive charges respectively) without energy dissipation [17,22] . In reality, the value of this speed of propagation of the electric field is some higher than that of light [although also the local transformations but of the transversal wave of neutrinos (antineutrinos) into electrons (positrons)]. This is not the same process although they have (both) the same transformations basically. Tcherenkov effect confirms this: justly when the speed value of the charged particles is situated at the limit of the value of propagation of the electric field in the medium, the intstability of the interactions takes place (and this particle speed value is some more than that of the light in this medium). Justly, these instabilities are transformed into the vibrations of these particles (in all directions relatively its trajectory), which are transformed (in their turn) into the vibrations of electrons (*surrounding*) (in fields of nuclei and other electrons), that radiate the waves of the visible frequences.

Evidently, in these new accelerators (synchrotrnos, rings of storage of charged particles), wherein the analogous "relativist" destabilization takes place with much higher speed values, there is the production of the waves with colossal frequency values, which are much greater than the value of 1.8×10^{21} Hz, never seen. The Lorentz force of interactions of the charged particles is also proportional to their speed value. But one can utilize these beams of the new superfrequent coherent polarized waves (obtained in the 1st time) for production of the electric current with the same impressing frequence. Evidently the intensive light between two charged metallic discs (like of condensator) must change the conductance (resistance) of this condensator and consequently it must change the value of current of the electric chain with this condensator according to simple Ohm law. The deviation (to Sun) of the light at the Sun eclipse (famous Einstein experiment) justly confirms this (but not famous Theory of Relativity: to see definitive absolutely correct physico-mathematical proof of its end: WO 00/52989) and again

at two types of propagations: light (with interchanging variable electric and magnetic fields) an electric fields (with frequent periodic fields) [17,22], there are always transformations of the san neutrinos (antineutrinos) and electrons (positrons) with evident inter-influence. But in order to make the changing of current with propagation of the coherent polarized wave, one must make the slit (or finally a number of periodic slits) in insulator between two condensator discs with size (t of only the half of wavelength space. The direction of polarization of these waves must be perpendicular to the condensator discs.

One can make such slit with help of yet liquid surface of insulator (melted), in descending the plate ("carcass" for insulator) in the liquid (that will be fixed on insulator in solid state later) until necessary size of slit. So one could have the electric currents, never produced before (after simple consecutive electric filtration of this current having ultrafrequence).

Evidently these electric currrents can produce the powerful electromagnetic waves of all frequences, including those of the visible light (with help of too simple condensator and induction) like the radio waves. In the case of the visible light this is the lighting of the direct transformation of the energy of electricity into that of light with efficiency ~100% instead of several percents with lamps at present. One can utilize these electric currents for technological and scientific purposes like the mesurement of the most rapid processes like justly the switching of the transformations. neutrino⟹ electron during the propagation of electric field.

Evidently, these electromagnetic waves with all their frequences can be utilized as carrier waves for any radio or tele communication. Certainly, one can choose the perfect conditions without attenuation (practically) of the wave intensity (for instance even through Earth).

Examples of routine technologies used in the best patents.

For p.7 (Rev.2). To obtain the strong layers of protecting substances (armour) like layers of cement, steel, lead, cupper, cadmium and even adapting layer of resin epoxyde. There is a number of inventions as WO 00/36611, 00/52707, 00/52708, 96/36972; EP 757361, FR 2776118, 2790588, 2790589, 2776118.

For p.7 (Rev. 2). Production of isotopes is well written in a number of patents like WO 01/15177, 00/27477 and EP 0962942.

For p.7 (Rev. 3). Creation of elevated and permanent temperatures, one can do it with help of routine technics, clearly descibed in patents like WO/69769, 00/25152; EP 234150, 404681, 008967; FR 2770648, 2720506, 2619622..

For p.10 (Rev. 5, 7). The productions of synchrotron radiation (with its numerous applications [63] like intergrated circuits alsol) are routine technics, described in a number of patents like WO 91/01076, EP 813255, 582193, 531066, 265797, 361956, 481865, FR 2722327, 2607345, 2594621.

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The confirmative GLOBAL proof of this New Physics.

For such fantastical applications of the reality (finally), after such grandiose changing in Physics, ACCEPTED by all during all XXth century, the proofs are very important.

One cannot imagine the absence of collapse of all massive Univereses due to gravitational forces (and absence of accelerated movement in their directions) during unlimited time of their existence. And justly such confirmed absence of fields (of gravitation, particularly) in the real vacuum between Universes (without particles like neutrinos and antineutrinos) makes such collapse impossible.

The cosmic "rays" contain only the nuclei of all elements, surely without atoms! (and also electrons and protons) [63, v.4, pp.503-513]. This confirms clearly that there are no neutrinos and antineutrinos between Universes, that destructs the electromagnetic forces and justly eliminates the electrons from atoms. The fact of presence, in these rays, of neutrons and protons (baryons) with neutrinos, antineutrinos, electrons and positrons (leptons), attached in one particle, confirms the presence of weak interactions in the space between Universes, even without neutrinos and antineutrinos.

In the global systematic convergence (by great established facts), one sees the clear confirmation of successive Big Bangs, because the relative abundance of nuclei of elements in cosmic "rays" repeats clearly their universal abundance [63], that that can take place with, justly, the destruction of all cold Universe with all these elements in situ.

And this part of matter (the most rapid after explosion), leaves these Universes justly with titanic speeds of cosmic rays.

And again, there are no electromagnetic interactions of these nuclei (without electrons) having fantasticall charges with the substances (on their path) in our Universe: the stronger charged nuclei had to be present in diminished proportions (in proportion inversely to their fantastical chargell). Evidently, this can take place only due to velocities greater than those of light!

And the strong nuclear forces (in the cosmic nuclei) of short distance are present and without neutrinos and antineutrinos (in space). This is the key for the nature of all forces in Universes with their presence and absence in particular spaces, where one must be well careful in proposing the general conception (postulate) (that is justly too present in nuclear physics and often false). Evidently, even Laws of Newton must be REconsidered in the real vacuum of space: the "Universal" forces are not the same at all.